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MOSER, PATTERSON & SHERIDAN L.L.P.
595 SHREWSBURY AVE, STE 100
FIRST FLOOR
SHREWSBURY, NJ 07702

EXAMINER	
CHUNG, JASON J	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/526,100	SHEPPARD ET AL.	
	Examiner	Art Unit	
	Jason J. Chung	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 10/27/2004 regarding claims 39-45 have been fully considered but they are not persuasive.

The applicant argues on pages 26-27 of the response that Martinez does not disclose a bias switch that turns on and off in response to a pulse train since the bias switch is "dependent to the turning on and off of the pulse train generated by the optical receiver", whereas the AND gate in Martinez is "dependent on a plurality of factors". The examiner respectfully disagrees with this assertion. The examiner interprets the claim broader than the interpretation of the applicant. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the bias switch turning on and off dependent **SOLELY** on the pulse train) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, Martinez discloses the IR module 24 (optical receiver for decoding the...corresponding pulse train) sends the optical signal to an AND gate 59 (bias switch...to the pulse train) and the signal is sent to the modulator 65 and oscillator 63 (column 9, lines 8-20, figure 6). The AND gate receives pulse trains from the optical receiver 24 that are logic high

"1's", which reads on turning on the AND gate (bias switch). The AND gate receiving a logic low "0's" reads on turning off the AND gate (bias switch).

The applicant argues on page 28 of the response that since Martinez does not disclose the bias switch, claims 40 and 45 are allowable. The examiner has proven the independent claims they branch from are not allowable, thus, the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-3, 9, 21, 22, 24, 25, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth (US Patent # 6,286,142) in view of Schultheiss (US Patent # 6,208,384).

Regarding claim 1, Ehreth discloses a network 40 delivers video signals to communications controller 30 (residential gateway) and to televisions located in different locations (column 2, line 59-column 3, line 15 and figure 1), which meets the limitation on receiving, decoding, and distributing signals from telecommunications network to a plurality of televisions locatable in at least two separate locations via a residential gateway.

Ehreth discloses the upstream signaling receiver 80 receives signals from remote selector 70 (remote control) (column 3, line 65-column 4, line 12), which meets the limitation on

receiving channel select commands from remote control devices associated with a plurality of televisions.

Ehreth discloses the video signal is received from a broadband/narrowband network (column 3, lines 10-20), which meets the limitation on receiving a video signal from the telecommunications network.

Ehreth discloses the communications controller 30 (residential gateway with video processor) receives the video signal from the drop cable (column 3, lines 11-34), which meets the limitation on transmitting the video signal to a video processor.

Ehreth discloses the communications controller 30 (residential gateway) has an upstream signaling receiver 80 that receives channel select commands and transmits the selected video signal to the appropriate television set (column 3, lines 35-50 and column 4, lines 44-62), which meets the limitation on processing the video signal to produce television signals corresponding to the channel select commands and transmitting the television signals to the respective televisions.

Ehreth discloses receiving channel select commands and suggests receiving the channel select commands directly at the residential gateway by disclosing that the remote selector may be used in other suitable signal transmission media (column 4, lines 8-12).

Ehreth fails to disclose the channel select commands of the remote control associated with a television located in close proximity to the residential gateway and the channel select commands are received directly by a receiver within the residential gateway. Schultheiss discloses the personal computer 12 (residential gateway) may receive cable, Internet, or satellite signals (column 5, lines 1-10), which meets the limitation on residential gateway. Schultheiss discloses the infrared commands are transmitted to the personal computer receiver 26 (column 5,

lines 30-43), which meets the limitation on commands of the optical remote control associated with a television located in close proximity to the residential gateway and the commands are received directly by the receiver 26 within the residential gateway 12. Schultheiss discloses it is an object of the invention to provide additional services without costly add on units without requiring memory and computing power added (column 1, lines 46-53). It would have been obvious to one of ordinary skill in the art to modify Ehreth to have a receiver in the gateway that receives channel change commands directly as taught by Schultheiss in order to provide additional services without requiring costly add on units to be added.

Regarding claim 2, as previously disclosed, Schultheiss discloses directly receiving the infrared signal at the gateway's 12 infrared (optical) receiver 26 (column 5, lines 39-43).

Regarding claim 3, Ehreth discloses the television set 100 and channel selector and signaling unit may be incorporated within or integrated into television set 100 (column 3, lines 2-3). Ehreth discloses the remote selector 70 can transmit infrared radiation to the channel selector and signaling unit 50 and the signals are sent via network 90 (media) to the controller 30 (residential gateway) (column 3, line 65-column 4, line 7), which meets the limitation on televisions remotely located from the residential gateway over media 90 connecting the remotely located televisions to the residential gateway.

Regarding claim 9, the limitations in claim 9 have been met in claim 1 rejection. Ehreth discloses the additional limitation of a network interface module 32 (figure 1). Ehreth discloses upstream signaling receiver 80 (remote control processor) (column 3, lines 35-50), which meets the additional limitation on remote control processor.

Regarding claim 21, the limitations in claim 21 have been met in claims 1, 9 rejections.

Regarding claim 22, as previously disclosed in claim 1 rejection, Schultheiss discloses the limitation on close in proximity via a connection. As previously disclosed, Ehreth discloses the television is connected to communication controller 30 (residential gateway) via a video system distribution network 90, which may be various types of media (column 3, lines 51-60). Neither Ehreth nor Schultheiss discloses the media being S-video cables. The examiner takes Official Notice that media such as S-video cables are notoriously well known in the art for being compatible with NTSC signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss to have S-video cables in order to provide more compatibility for receiving NTSC signals.

Regarding claim 24, the limitations in claim 24 have been met in claims 1-2 rejection.

Regarding claim 25, the limitations in claim 25 have been met in claim 3 rejection.

Regarding claim 29, as disclosed in claim 1 rejection, Schulthiess discloses the signals are sent wirelessly from the gateway to the TV. Neither Ehreth nor Schultheiss discloses the media being S-video cables. The examiner takes Official Notice that media such as S-video cables are notoriously well known in the art for being compatible with NTSC signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss to have S-video cables in order to provide more compatibility for receiving NTSC signals.

2. Claims 4-8, 11, 14, 15, 17, 20, 23, 26-28, 30-33, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view Schultheiss in further view of Martin (US Patent # 5,500,691).

Regarding claim 4, Ehreth discloses the remote control 70 uses infrared radiation to send signals to the signaling unit 50 (optical receiver) (column 3, line 65-column 4, line 12). As stated in claims 1 and 3 rejections, Ehreth teaches the signal sent from the remotely located television to the residential gateway, which meets the limitation on "transmitting optical signals from ... remotely located televisions" and "transmitting the RF signals...over media".

Neither Ehreth nor Schultheiss discloses the infrared signal being converted into a RF signal. Martin discloses an infrared signal received and converted into a RF signal where and the RF signal is sent to the television (column 3, lines 4-15), which meets the limitation on detecting the optical signals and generating corresponding demodulated pulse trains at the optical receivers, transmitting the pulse trains to the RF transmitters, and receiving the pulse train and generating corresponding RF signals at the RF transmitter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss to convert the infrared signal into a RF signal as taught by Martin in order to avoid line of sight communication in IR communications.

Regarding claim 5, Ehreth discloses the upstream signaling receiver 80 (remote antennae module) may be located at any other suitable location (column 4, lines 44-51). Ehreth discloses the distribution network 90 (media) connects the remote sites 104 (remotely located televisions, column 3, lines 7-10) to the upstream signaling receiver 80 (figure 1, column 3, lines 51-64). Martin discloses RF signals as disclosed in claim 4 rejection.

Ehreth discloses the channel selection is sent from the signaling unit 50 (transmitter) to the upstream signaling receiver 80 (remote antennae module) (column 4, lines 24-43), which

meets the limitation on "transmitting the signals from the...to the remote antennae module" and "extracting the channel select...remote antennae module".

Ehreth discloses the communications controller 30 (residential gateway) communicates with the upstream signaling receiver (remote antennae module) in order to receive the signals and transmit them the user (column 3, lines 35-50), which meets the limitation on transmitting the channel select commands from the remote...to the residential gateway.

Regarding claim 6, Ehreth discloses the video distribution network 90 is used for cable TV and that other types of transmission media may be used (column 3, lines 51-64). Neither Ehreth, Schulthiess, nor Martin discloses the network media line being a coaxial cable. The examiner takes Official Notice that bi-directional being coaxial cables are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss in further view of Martin to have the bi-directional line be a coaxial cable in order to provide compatibility with a commonly used coaxial cable outlet.

Regarding claim 7, Ehreth discloses the upstream signaling receiver 80 (media interface device) may be located at any other suitable location (column 4, lines 44-51). Ehreth discloses the distribution network 90 (media) connects the remote sites 104 (remotely located televisions, column 3, lines 7-10) to the upstream signaling receiver 80 (figure 1, column 3, lines 51-64). Martin discloses RF signals as disclosed in claim 4 rejection.

Ehreth discloses the channel selection is sent from the signaling unit 50 (transmitter) to the upstream signaling receiver 80 (media interface device) (column 4, lines 24-43), which meets

the limitation on receiving the RF signals at the media interface device and "extracting the channel select...media interface device".

Ehreth discloses the communications controller 30 (residential gateway) communicates with the upstream signaling receiver (media interface device) in order to receive the signals and transmit them the user (column 3, lines 35-50), which meets the limitation on transmitting the channel select commands from the remote...to the media interface device.

Regarding claim 8, Schultheiss discloses infrared (optical) signals in claim 1 rejection.

Regarding claim 11, the limitations in claim 11 have been met in claim 4 rejection.

Regarding claim 14, the limitations in claim 14 have been met in claim 5 rejection.

Regarding claim 15, the limitations in claim 15 have been met in claim 6 rejection.

Regarding claim 16, the remote antennae module disclosed in the reference of Ehreth inherently extracts channel select commands at a frequency, however, the exact value of the frequency is undisclosed by Ehreth, Schultheiss, and Martin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss in further view of Martin to have a 1 KHz signal in order to use a non-allocated FCC frequency that does not interfere with consumer frequencies (i.e. radio, television).

Regarding claim 17, the limitations in claim 17 have been met in claim 7 rejection.

Regarding claim 20, as disclosed in claim 7 rejections, Ehreth discloses the upstream signaling receiver 80 (media interface device) can be located within (column 4, lines 44-62), which meets the limitation on directly connected.

Regarding claim 23, the limitations (optical **conversion** device) in claim 23 have been met in claims 4-5 rejections.

Regarding claim 26, the limitations in claim 26 have been met in claim 4 rejection.

Regarding claim 27, the limitations in claim 27 have been met in claim 5 rejection.

Regarding claim 28, as disclosed by Ehreth, the upstream signaling receiver 80 (remote antennae module) is located within the communications controller 30 (media interface device) (column 44-51), which meets the limitation on wherein the remote antennae module is located within a media interface device.

Regarding claim 30, the limitations in claim 30 have been met in claims 1, 3, 4, 5 rejections.

Regarding claim 31, the limitations in claim 31 have been met in claims 9 and 11 rejections.

Regarding claim 32, the limitations in claim 32 have been met in claim 14 rejection.

Regarding claim 33, the limitations in claim 33 have been met in claims 31 and 32 rejections.

Regarding claim 36, the limitations in claim 36 have been met in claim 28 rejection.

3. Claim 12, 13, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Schultheiss in further view of Martin in further view of Martinez (US Patent # 5,812,184).

Regarding claims 12, as disclosed in claim 4 rejection, Ehreth discloses an optical receiver. As disclosed in claim 4 rejection, Martin discloses an optical to electrical conversion device.

Neither Ehreth, Schultheiss, nor Martin discloses a bias switch turning on and off an oscillator and the oscillator producing a modulated RF signal and turning on and off in response to the switch. Martinez discloses the IR module 24 (optical receiver...corresponding pulse train) sends the optical signal to an AND gate 59 (a bias switch...response to the pulse train) and the signal is sent to the modulator 65 and oscillator 63 (column 9, lines 8-20, figure 6); the combination of the modulator 65, oscillator 63, and crystal 61 reads on the claimed oscillator that modulates a signal to produce an RF signal. The AND gate receives pulse trains from the optical receiver 24 that are logic high "1's" and output the logic high to the modulator 65 (part of the claimed oscillator) and the modulator 65, oscillator 63, and crystal 61 responds to the logic high pulse train and convert the signal into an electrical signal, which meets the limitation on the bias switch and the oscillator coupled to the bias switch.

Martinez discloses the TRM 22 connects to the television (column 8, lines 21-41; figures 4, 5). Martinez discloses an isolator 47 (column 9, lines 8-20), which meets the limitation on a diplex filter injecting in the direction of the residential gateway.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss in further view of Martin to have a bias switch driving an oscillator in response to pulse trains as taught by Martinez in order to synchronize the oscillator to the pulse trains.

Regarding claim 13, Martinez suggests an attenuator with the disclosure of an isolator 47 (column 9, lines 8-20); an isolator is a form of an attenuator. Neither Ehreth, Schultheiss, Martin, nor Martinez discloses an attenuator between the diplexer filter and the oscillator. The examiner takes Official Notice that attenuators are notoriously well known in the art for

attenuating a signal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss in further view of Martin in further view of Martinez to have a attenuator between the oscillator and the diplexer filter in order to limit the signal coming into the oscillator to prevent the diplexer filter from injecting too large of a signal to the residential gateway.

Regarding claim 34, the limitations in claim 34 have been met in claim 12 rejection.

Regarding claim 35, the limitations in claim 35 have been met in claim 13 rejection.

4. Claim 18, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Schultheiss in further view of Martin in further view of Budow (US Patent # 5,521,631).

Regarding claim 18, neither Ehreth, Schultheiss, nor Martin discloses a diplexer. Budow discloses a diplexer located within a room terminal 15 (residential gateway) (column 14, lines 34-43). Budow discloses a diplexer 405 is used to pass the television signals (other signals) directly to the TV (column 14, lines 44-50, figure 5), which meets the limitation on the media interface device includes a diplexer for extracting other signals from the media. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss in further view of Martin to have a diplexer in the residential gateway as taught by Budow in order to pass the television signals directly to the TV.

Regarding claim 37, the limitations in claim 37 have been met in claim 18 rejection.

5. Claim 19, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth in view of Schultheiss in further view of Martin in further view of Budow in further view of Flickinger (US Patent # 5,901,340).

Regarding claim 19, neither Ehreth, Schultheiss, Martin, nor Budow discloses a balun. Flickinger discloses a wall outlet (residential gateway) comprising of a balun that impedance matches (column 3, lines 7-20), which meets the limitation on a balun that impedance of a subset of the other signals can be adjusted so that the subset of the other signals can be processed by the gateway. Flickinger discloses in addition to receiving video signals from the VCR 24, the classroom receives video signals from an external source (column 3, lines 38-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ehreth in view of Schultheiss in further view of Martin in further view of Budow to have a balun as taught by Flickinger in order to impedance match the signals.

Regarding claim 38, the limitations in claim 38 have been met in claim 19 rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 39, 41-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Martinez.

Regarding claim 39, Martinez discloses the IR module 24 (optical receiver for decoding the...corresponding pulse train) sends the optical signal to an AND gate 59 (bias switch...to the pulse train) and the signal is sent to the modulator 65 and oscillator 63 (column 9, lines 8-20, figure 6); the combination of the modulator 65, oscillator 63, and crystal 61 reads on the claimed oscillator that modulates a signal to produce an RF signal. The AND gate receives pulse trains from the optical receiver 24 that are logic high "1's" and output the logic high to the modulator 65, then the modulator 65, oscillator 63, and crystal 61 responds to the logic high pulse train and convert the signal into an electrical signal, which meets the limitation on the optical receiver and the oscillator coupled to the bias switch.

Martinez discloses the TRM 22 connects to the television (column 8, lines 21-41; figures 4, 5). Martinez discloses an isolator 47 (column 9, lines 8-20), which meets the limitation on a diplex filter injecting in the direction of the residential gateway.

Regarding claim 41, Martinez discloses the TRM 22 (optical conversion device, figures 6 & 4) is connected to a TV via converter box 18 and the user uses remote control 20 (column 8, lines 21-41); the receiver 49 of the TRM 22 detects the channel in which the receiver is tuned (column 8, lines 42-64), which meets the limitation on controlling the channel selection with the remote control.

Regarding claim 42, Martinez discloses the RF carrier generated by the oscillator 63 and crystal 61 is sent downlink on the cable 7 (media) via isolator 47 (diplexer filter) (column 9, lines 8-20). Martinez discloses the cable 7 connects to the CATV converter (figure 6) and the CATV converter is placed on top of the TV (figure 4) and receives signals from a network (figure 5), which meets the limitation on the diplexer filter injects the RF signal onto the media in the

direction of the direction of a residential gateway that controls communications between the television and a telecommunications network.

Regarding claim 43, Martinez discloses the stand-alone response module 22 is placed on top of TV and uses a coaxial cable (figures 4, 5; column 8, lines 22-41).

Regarding claims 44, the limitations in claim 44 have been met in claims 39, 41-43 rejections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 40, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinez.

Regarding claim 40, Martinez fails to disclose an attenuator connected between an oscillator and diplexer. The examiner takes Official Notice that attenuators are notoriously well known in the art for attenuating a signal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martinez to have a attenuator between the oscillator and the diplexer filter in order to limit the signal coming into the oscillator to prevent the diplexer filter from injecting too large of a signal to the residential gateway.

Regarding claim 45, the limitations in claim 45 have been met in claim 40 rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Chung whose telephone number is (703) 305-7362. The examiner can normally be reached on M-F, 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJC

HAI TRAN
PRIMARY EXAMINER